

Fig. 1

Fig. 1 cont'd

```

      BstAPI                               TatI
      |                                   |
GCCGGGGCAGTCGTTTGCTATGCCCTTGCAGGAGTATTGGTGCAGTACATTGGCTGGGCC
721 -----+-----+-----+-----+-----+-----+-----+ 780
CGGCCCCGTCAGCAACGATACGGGGAACGTCTCATACCACGTCATGTAACCGACCCGG

a   A G A V V A M P L A G V L V Q Y I G W A -

      BsgI                               PciI
      |                                   |
TCTGCCTTTTATATTTACGGGATGTTTGGAAATTATTTGGTACATGTTTTGGCTGCTGCTG
781 -----+-----+-----+-----+-----+-----+-----+ 840
AGACGGAAAATATAAATGCCCTACAAACCTTAATAAACCATGTACAAAACCGACGACGAC

a   S A F Y I Y G M F G I I W Y M F W L L L -

      PstI           HphI
      |               |
CAGGCTTATGAGTGTCCAGCAGTTCACCCAACAATATCCAATGAAGAACGGACCTACATA
841 -----+-----+-----+-----+-----+-----+-----+ 900
GTCCGAATACTCACAGGTCGTCAAGTGGGTGTTATAGGTTACTTCTTGCCTGGATGTAT

a   Q A Y E C P A V H P T I S N E E R T Y I -

                BbeI
                HaeII
                HhaI
                SfoI
                BsaHI
                HinPI
                NarI
                KasI
                MscI
                BglI
                NcoI
                |
GAGACAAGTATAGGAGAAGGCGCCAACCTTGGCCAGTCTGAGCAAATTCAACACACCATGG
901 -----+-----+-----+-----+-----+-----+-----+ 960
CTCTGTTTCATATCCTCTTCCGCGGTTGAACCGGTCAGACTCGTTTAAGTTGTGTGGTACC

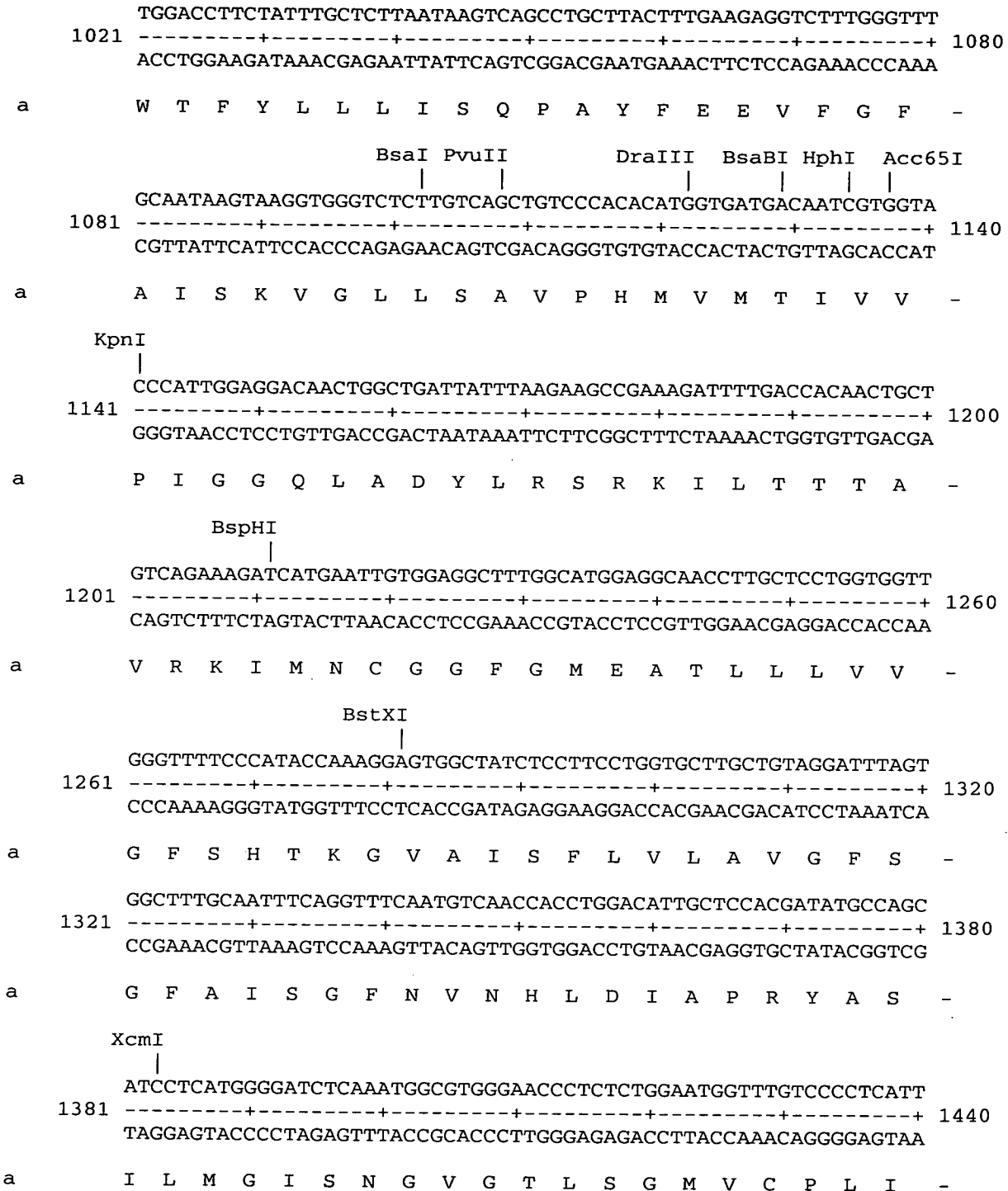
a   E T S I G E G A N L A S L S K F N T P W -

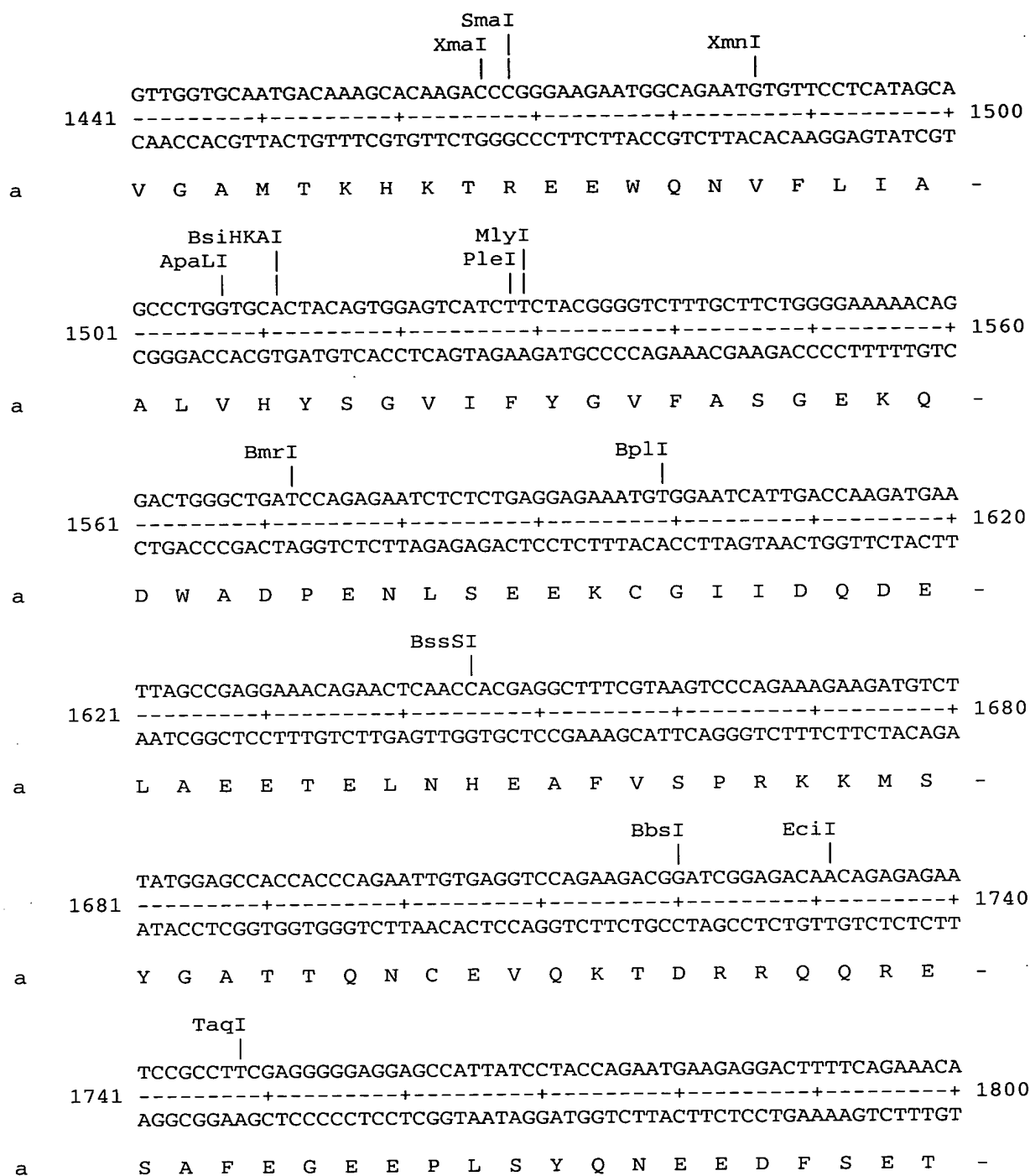
                                BstXI
                                |
AGAAGGTTTTTTCACATCCTTGCCTGTCTATGCCATTATTGTGGCAAACTTTTGTAGAAGC
961 -----+-----+-----+-----+-----+-----+-----+ 1020
TCTTCCAAAAAGTGTAGGAACGGACAGATACGGTAATAACACCGTTTGAAAACATCTTCG

a   R R F F T S L P V Y A I I V A N F C R S -

```

Fig. 1 cont'd

**Fig. 1 cont'd**

**Fig. 1 cont'd**

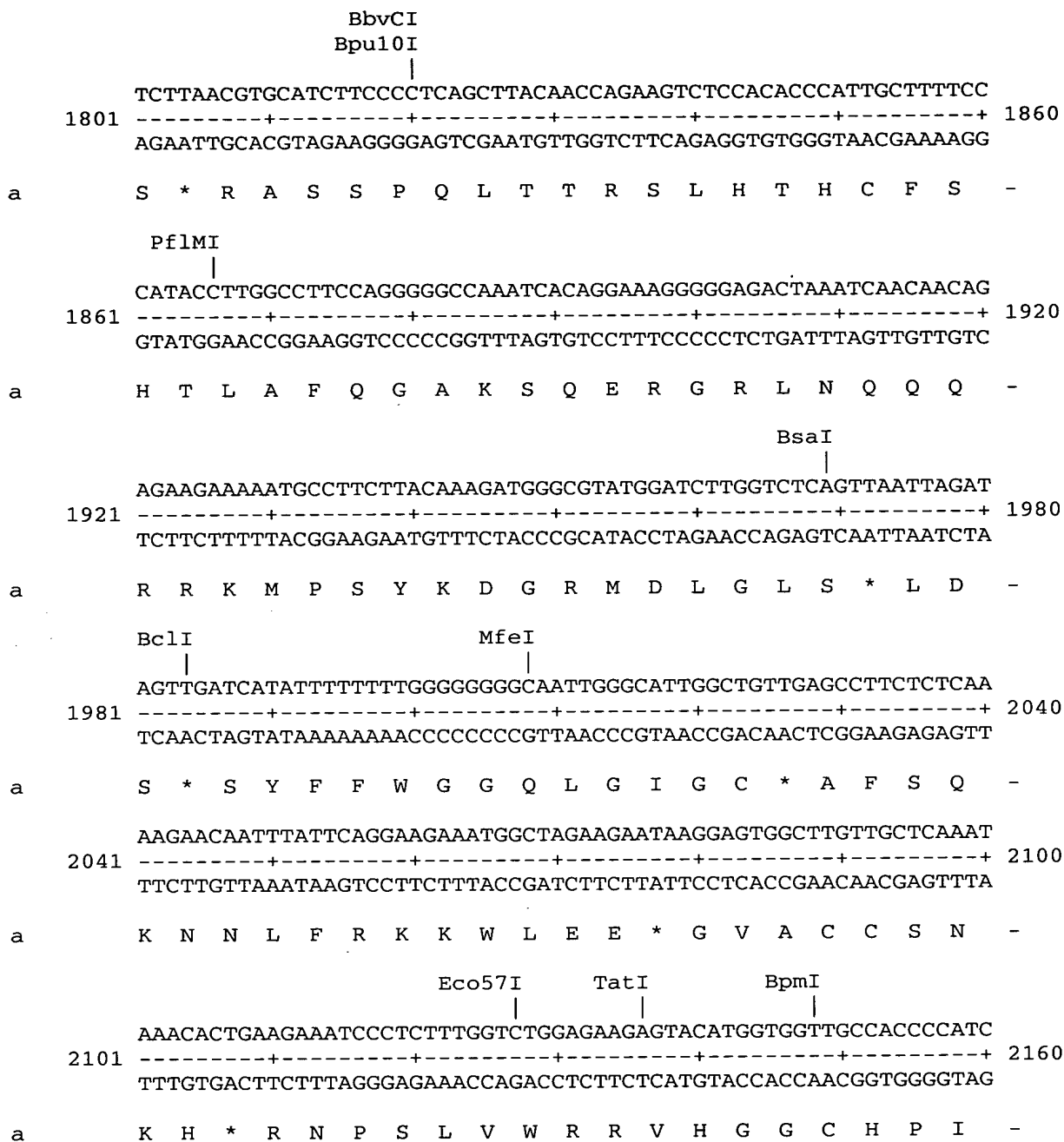


Fig. 1 cont'd

Fig. 1 cont'd

2581 GNGTGTNAGNNNGNATNANAANAAAAAN
-----+-----+----- 2607
CNCACANTCNNNCNTANTNTTNTTTTN

Fig. 1 cont'd

05015181 072401
10420" 18151650

0915131.072401
F04220" TSTST660

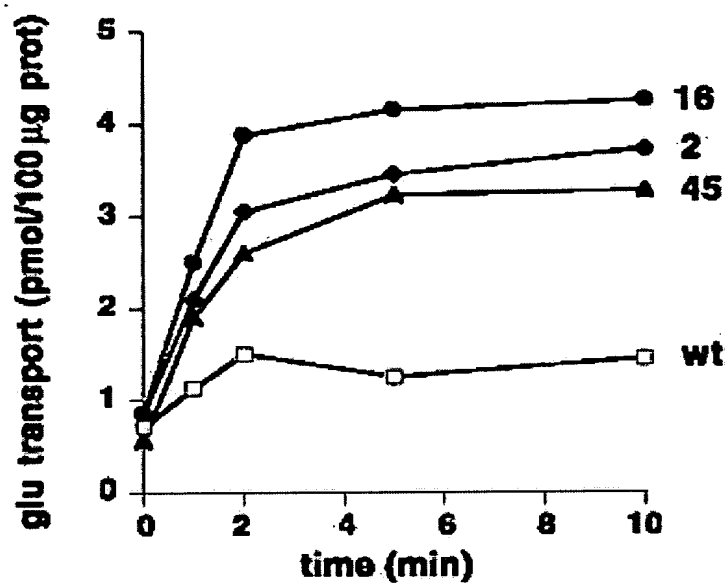
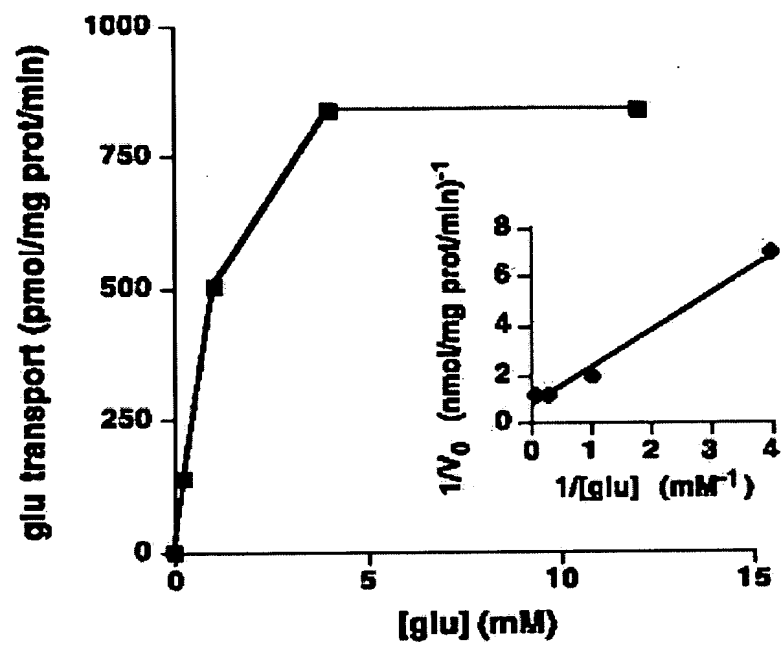


Fig. 2A

*Fig. 2B*

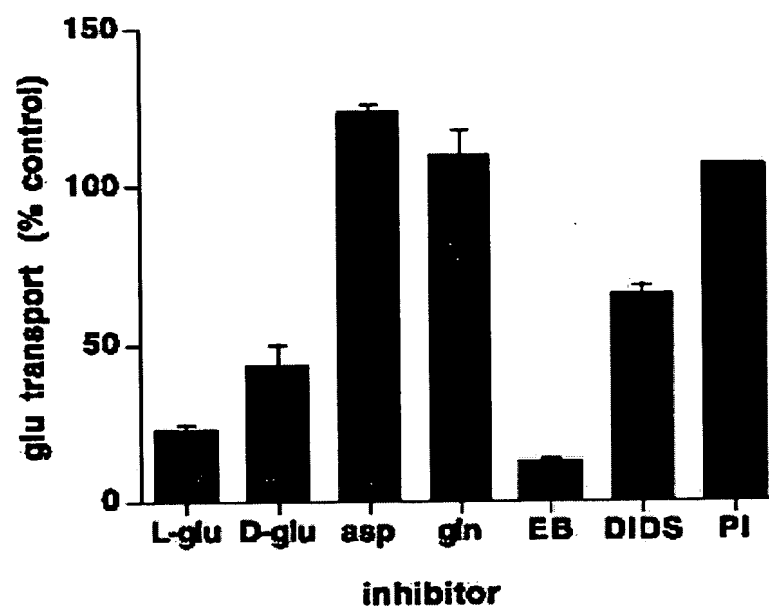


Fig. 3

09151.02401
T04220" T8T5T650

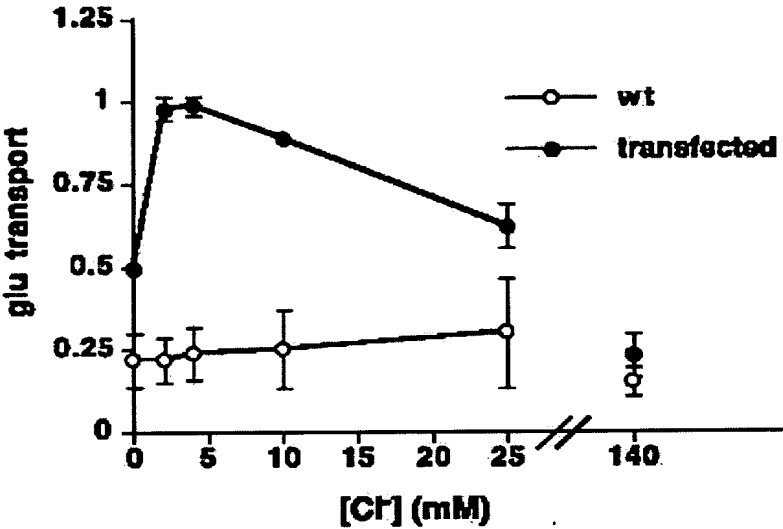


Fig. 4A

0915431.02401
T04240" T8T5T660

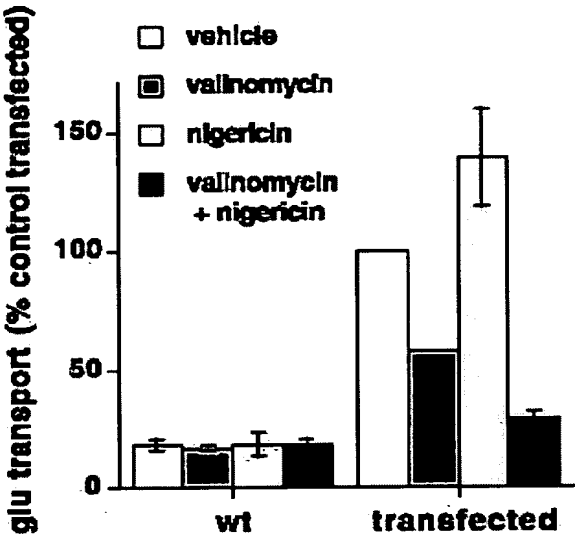


Fig. 4B

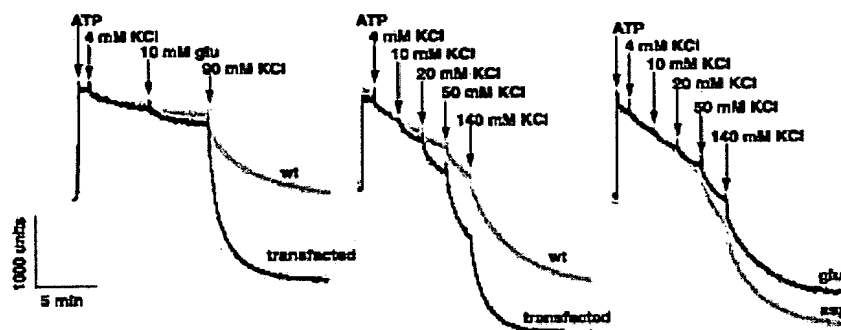


Fig. 5A

Fig. 5B

Fig. 5C

Fig. 5A, 5B, and 5C

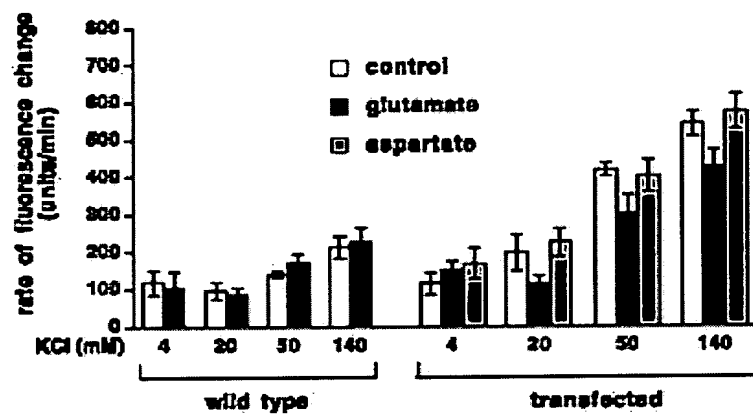


Fig. 5D

TC4220"TEST60

rVGLUT2	MESVKQRI LAPGKEG IKNFAGKS LGQIYRVLEKKQDNRETIETL DG	KPLEVPEKKA PLCDCTCF	GLPR RYI IAIMSGLG	80	
rVGLUT1	MEFRQEEFRKLAGRALGRHLRLEKROEGAEETLELSA DG	RPVTHTRDP PVVDCTCF	GLPR RYI IAIMSGLG	72	
EAT4	MVGEPLAKMTAAASATGAAPPOQMQE EGNENPMQMHNSNKLVLQVMEQWI	ENENPMQMHNSNKLVLQVMEQWI	GKCRKRATLAILAMGC	66	
hsialin	MRSRQVRLARNDGGEESTDRTPLLPGAPRAEAPV	CCSARYNLAILLAFPG		49	
rNap11		MENRCLPKKVP GFCSPFRYGLAILLLHFC		27	
★					
rVGLUT2	FCISFGIRCNLGVAIVDMVNNTI	HRGGKV I KEKAK	FNNDPETVGM IHGSPFMGYIMTQIPGGYI ASRLA ANRVF	155	
rVGLUT1	FCISFGIRCNLGVAIVSMVNNTI	HRGGHV V QMKAQ	FNNDPETVGL IHGSPFMGYITQIPGGYI ASRLA ANRVF	147	
EAT4	FMISEGIRCNLGVAIVSMVNNTI	HRGGHV V QMKAQ	FNNDPETVGL IHGSPFMGYITQIPGGYI ASRLA ANRVF	138	
hsialin	FFIIVTAMRVNLSVAIVDMVNNTI	HRGGHV V QMKAQ	FNNDPETVGL IHGSPFMGYITQIPGGYI ASRLA ANRVF	139	
rNap11	NIVIMAQRVCLNLTVMAMVNKTEPPHLSNKSVAEMLDNVKNPVH	HRGGHV V QMKAQ	FNNDPETVGL IHGSPFMGYITQIPGGYI ASRLA ANRVF	109	
★					
rVGLUT2	GAAILLTSTLNMLIPSAARVHYG	CVIFVRILQGLVEGVTPYPA	CHGINSKWAPPLERSRLATTSFCGSYAGAVIAMPLA GILVQYTGWSS	244	
rVGLUT1	GFAIVATSTLNMLIPSAARVHYG	CVIFVRILQGLVEGVTPYPA	CHGINSKWAPPLERSRLATTSFCGSYAGAVIAMPLA GILVQYTGWSS	236	
EAT4	GFQIGVGFALNMLIPSAARVHYG	CVIFVRILQGLVEGVTPYPA	CHGINSKWAPPLERSRLATTSFCGSYAGAVIAMPLA GILVQYTGWSS	228	
hsialin	GFQIGVGFALNMLIPSAARVHYG	CVIFVRILQGLVEGVTPYPA	CHGINSKWAPPLERSRLATTSFCGSYAGAVIAMPLA GILVQYTGWSS	228	
rNap11	GSSTFLSSVLSLIPPAQVGC	AALVIVCRV LQGLA QGAVSTGQHGIVNKKWAPPLERGLT	TSMTLSG FVMGPFIALLVSGFCDLLGWPM	198	
★					
rVGLUT2	VFYVYGSFGMVWYIMFWLVS	YESPAKHPTIT DEERRVIEESIGESAN	LLGAMKEKFTPWRRKFFFTSMPPVMAIIVANFCRSWTFYLLLSQP	334	
rVGLUT1	VFYVYGSFGMVWYIMFWLVS	YESPAKHPTIT DEERRVIEESIGESAN	LLGAMKEKFTPWRRKFFFTSMPPVMAIIVANFCRSWTFYLLLSQP	326	
EAT4	PPYLYGVCGGIVNAXLWFCVT	PEKPAFHPTIS QEEKI IEDAI GHVSNTHPTI	RSI PPWKAIVTSKPVWAIIVANFCRSWTFYLLLSQP	316	
hsialin	VFYVYGVGTIGIFNGLLWIMLVSD	TPQKHKRISHYEKEYILSSLRNQLSSQKSV	PPWKAIVTSKPVWAIIVANFCRSWTFYLLLSQP	313	
rNap11	VFYVYGVGTIGIFNGLLWIMLVSD	TPQKHKRISHYEKEYILSSLRNQLSSQKSV	PPWKAIVTSKPVWAIIVANFCRSWTFYLLLSQP	284	
★					
rVGLUT2	AYPEEVFGFEISKVGLMSALV	PHLVMTIIVPIGGQIADFLRS	KQILSTTTVRKIMNCGGFGMEATLLLVVGYSHTR	GVAISFLVLAVGFS	423
rVGLUT1	AYPEEVFGFEISKVGLMSALV	PHLVMTIIVPIGGQIADFLRS	KQILSTTTVRKIMNCGGFGMEATLLLVVGYSHTR	GVAISFLVLAVGFS	415
EAT4	TYMKKEALGMAKADSGLLAAM	PHLVMTIIVPIGGQIADFLRS	KQILSTTTVRKIMNCGGFGMEATLLLVVGYSHTR	GVAISFLVLAVGFS	405
hsialin	TYMKKEALGMAKADSGLLAAM	PHLVMTIIVPIGGQIADFLRS	KQILSTTTVRKIMNCGGFGMEATLLLVVGYSHTR	GVAISFLVLAVGFS	403
rNap11	TYMKKEALGMAKADSGLLAAM	PHLVMTIIVPIGGQIADFLRS	KQILSTTTVRKIMNCGGFGMEATLLLVVGYSHTR	GVAISFLVLAVGFS	374
★					
rVGLUT2	GFAISGPNVNHLDIAPRYAS	ILMGI SNGVGTLSGMVCP	IIIVGAMTKNKSREEMQYVFLIAALVHYGGVIFYALFASGEKQPWADPEETSE	513	
rVGLUT1	GFAISGPNVNHLDIAPRYAS	ILMGI SNGVGTLSGMVCP	IIIVGAMTKNKSREEMQYVFLIAALVHYGGVIFYALFASGEKQPWADPEETSE	505	
EAT4	GFAISGPNVNHLDIAPRYAS	ILMGI SNGVGTLSGMVCP	IIIVGAMTKNKSREEMQYVFLIAALVHYGGVIFYALFASGEKQPWADPEETSE	494	
hsialin	GFCSSGFSNHNLDIAPRYAG	ILMGI SNGVGTLSGMVCP	IIIVGAMTKNKSREEMQYVFLIAALVHYGGVIFYALFASGEKQPWADPEETSE	493	
rNap11	FISFCGQLT NALDIAPRYYGFLKAV	TALIGIFGCLTSSSTA GLILNQDPEYAMHKNFFUWAG	CINVTCLAFYLLFAKGD IQDDWAKETKT	464	
★					
rVGLUT2	EKCGFTHEDEL	DEETGDI TQNYIN YGTTKSYGAT	SQENGWNGWEKKEE FVQESA QDAYSYKDRDDY	S582	
rVGLUT1	EKCGFVGH DQLAG	SDESEMEDEVEPPGAPPPSYGAT	HSTVQPPRPPPPVRDY	560	
EAT4	WSNRELVNKTGINCTGYGA	AETTFTQ	LPAGVDS SYQAQ AAPAPGTNPFASAWDE	HGSSGVVENPHYQQW	563
hsialin	WSNRELVNKTGINCTGYGA	AETTFTQ	LPAGVDS SYQAQ AAPAPGTNPFASAWDE	HGSSGVVENPHYQQW	495
rNap11	WSNRELVNKTGINCTGYGA	AETTFTQ	LPAGVDS SYQAQ AAPAPGTNPFASAWDE	HGSSGVVENPHYQQW	465

Fig. 6A

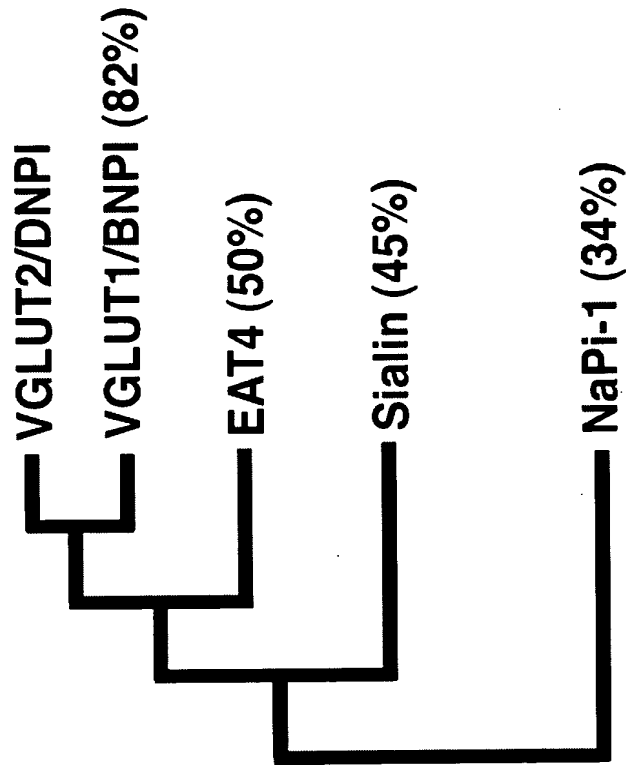


Fig. 6B

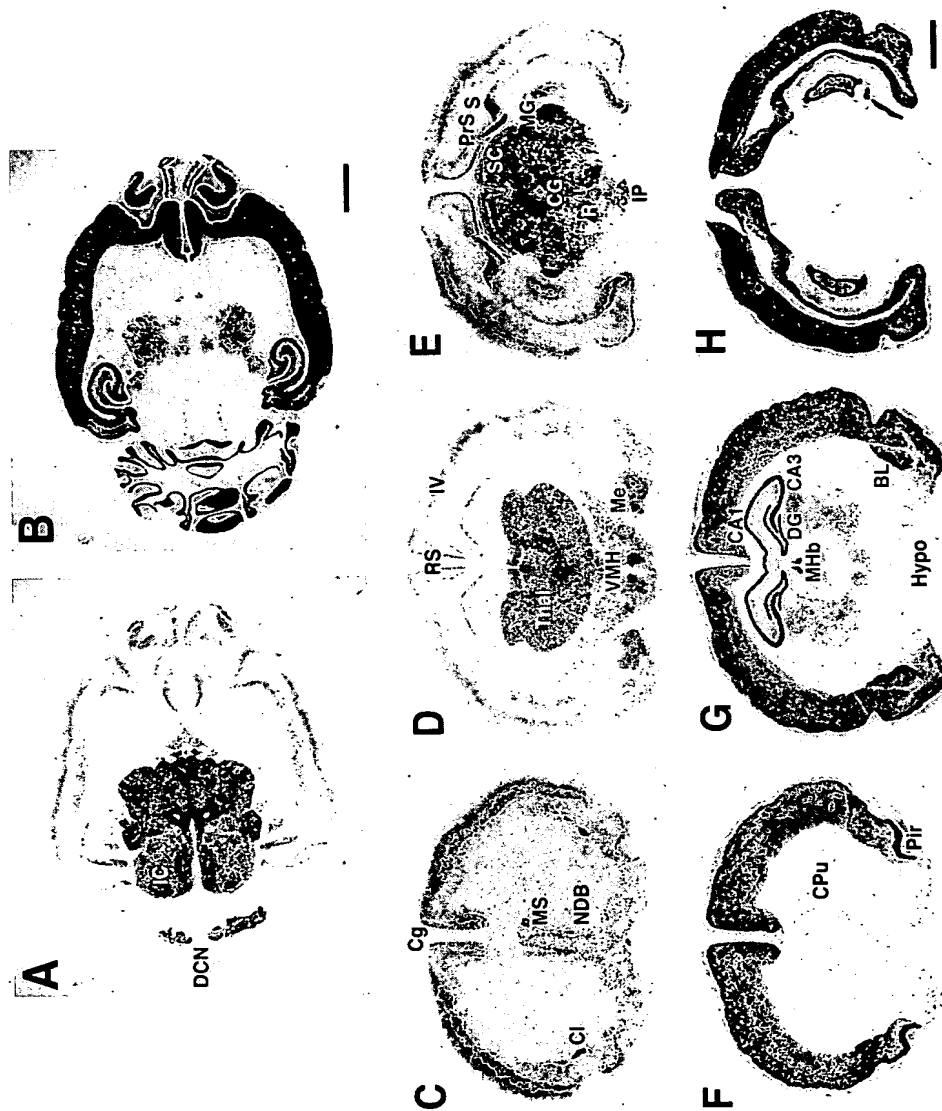


Fig. 7

VGLUT2

VGLUT1

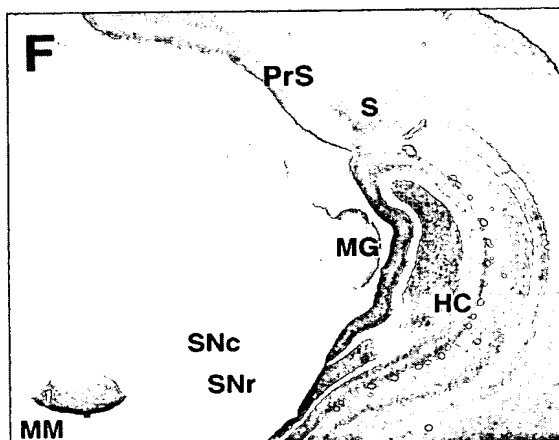
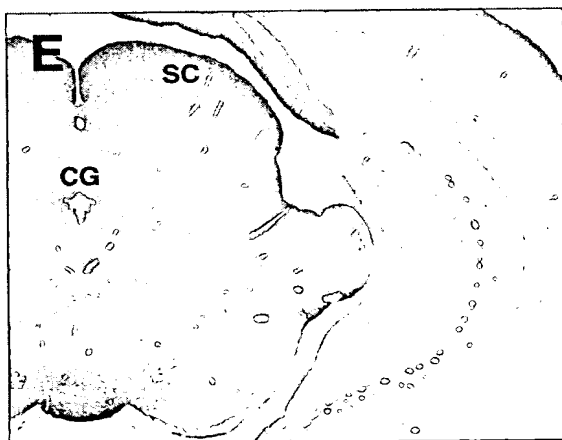
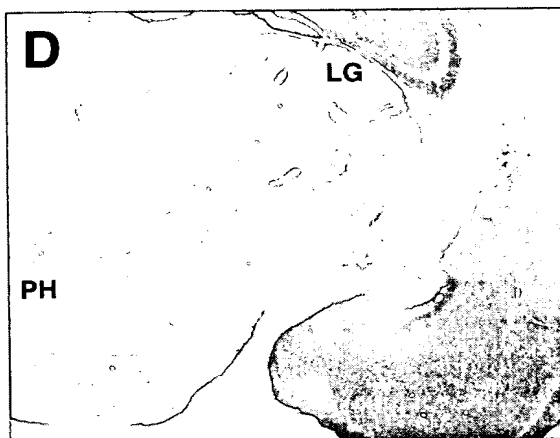
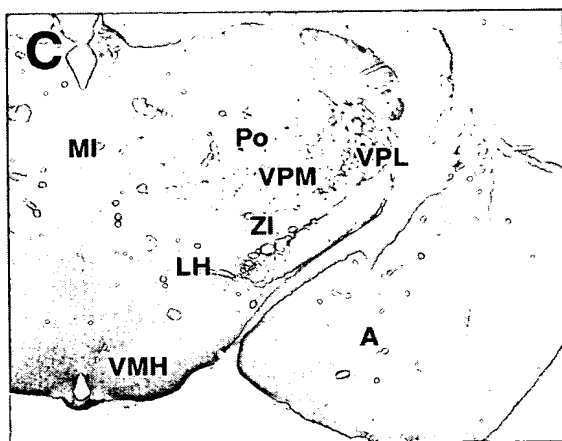
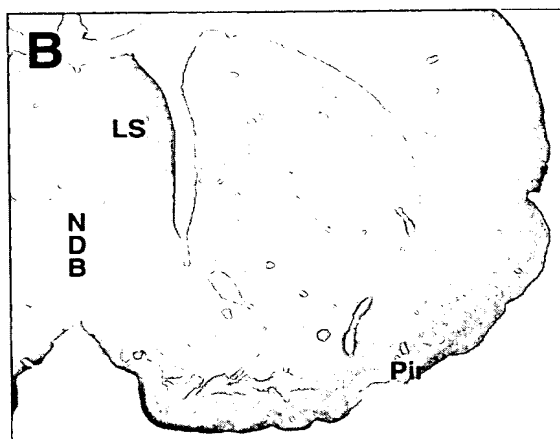
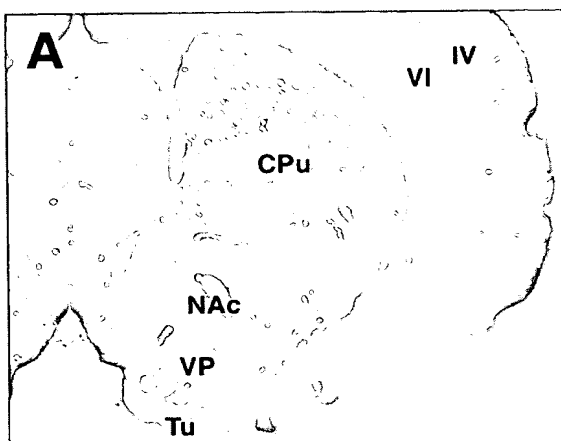


Fig. 8

09915181.07240k

05915181.072401

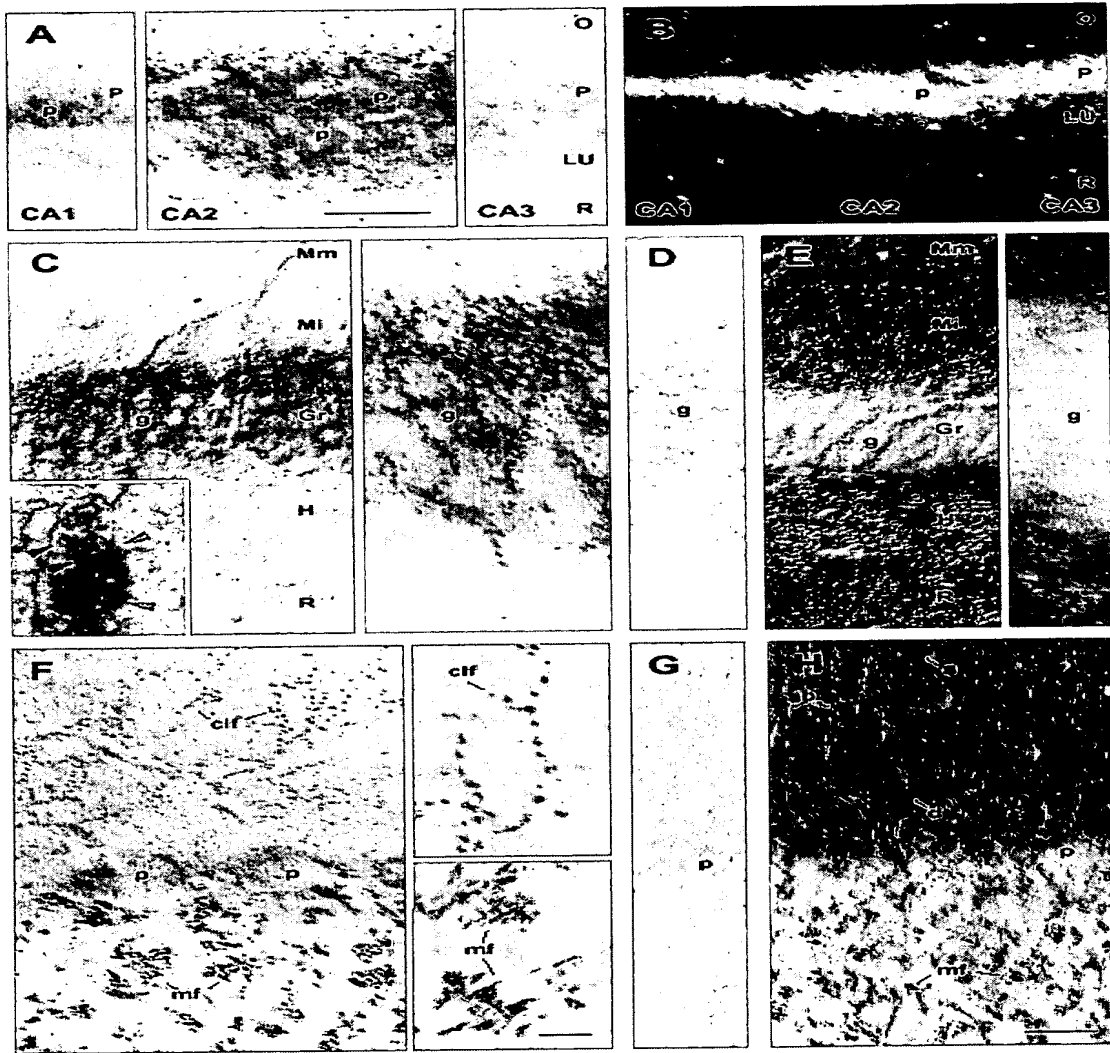


Fig. 9

Fig. 10A

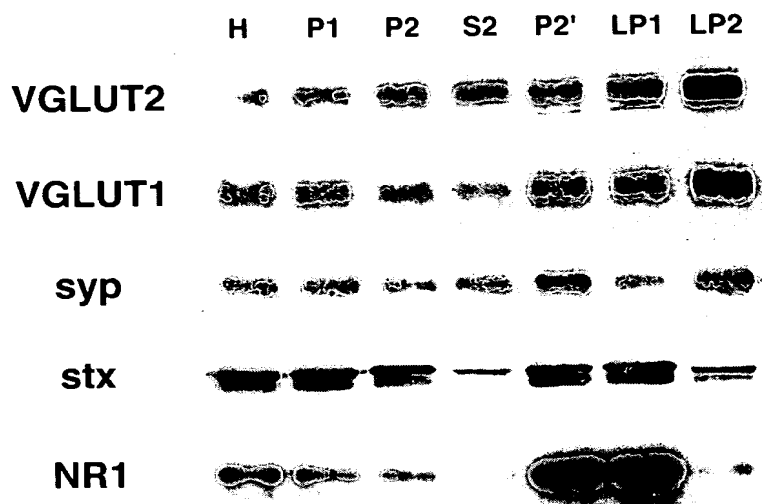
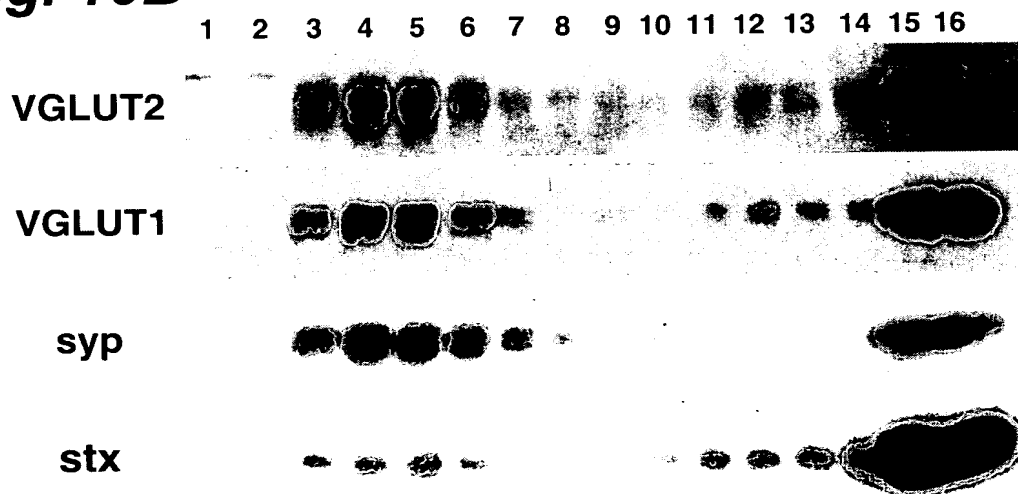


Fig. 10B



0915131.072401

Fig. 11A

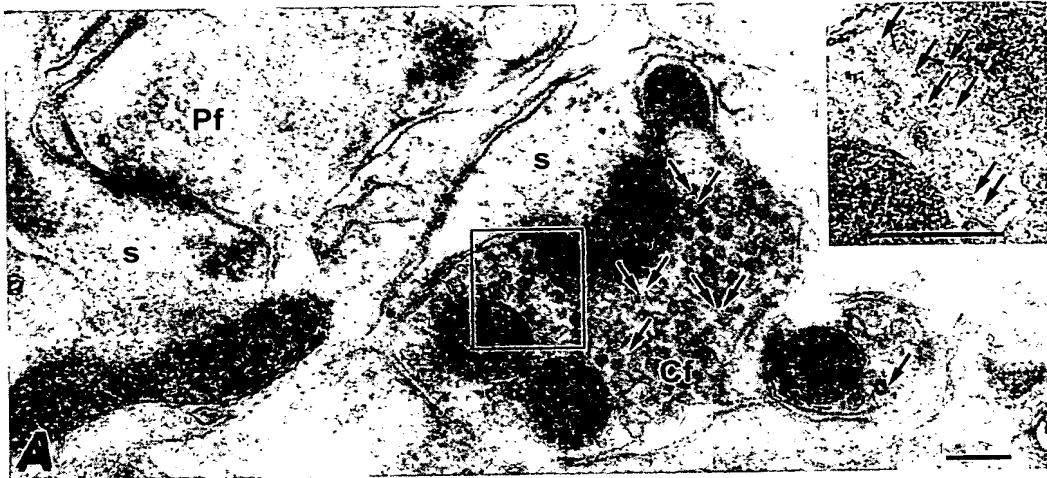


Fig. 11B

00915181.072401

0915191-072401
T04270-T8T5T650

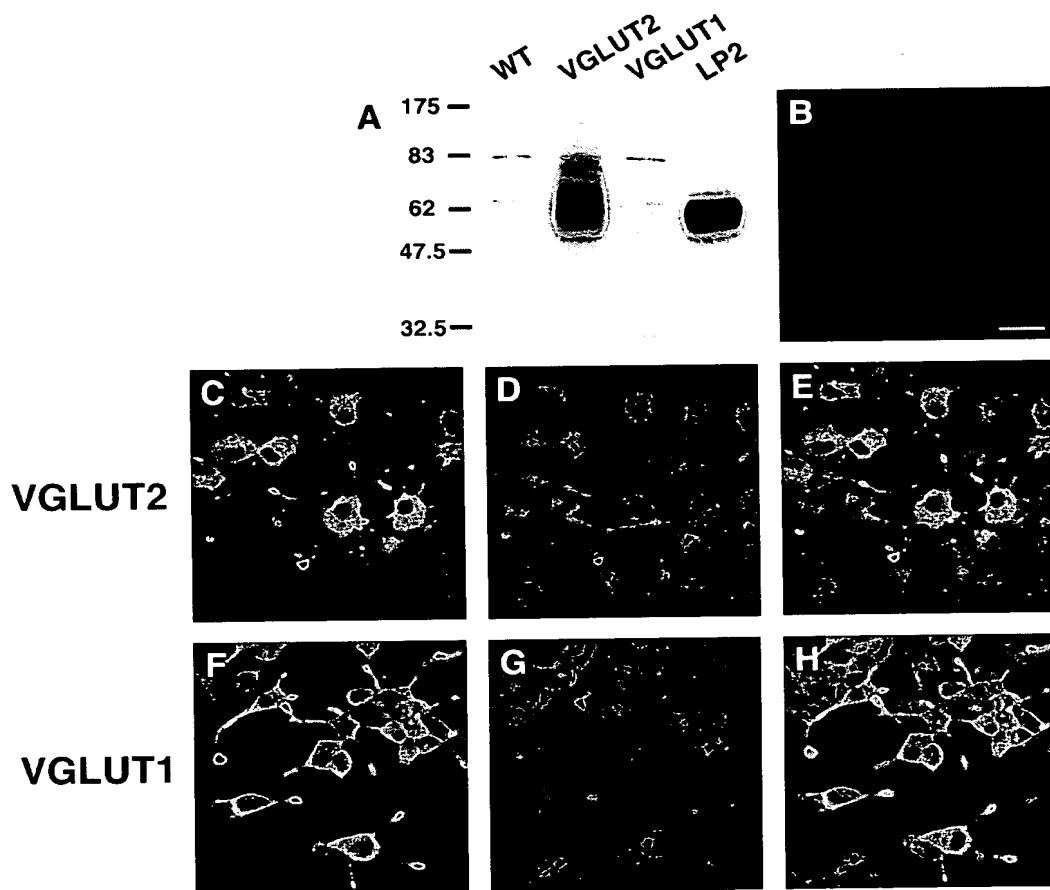


Fig. 12

Fig. 13A

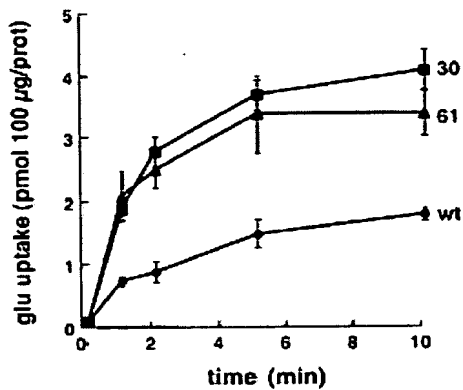


Fig. 13B

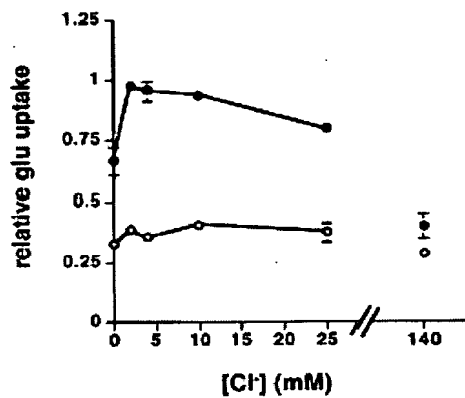
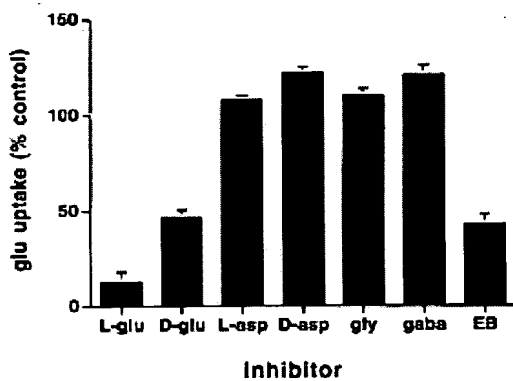
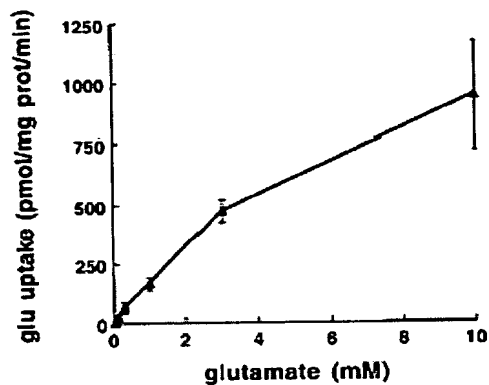


Fig. 13C

Fig. 13D

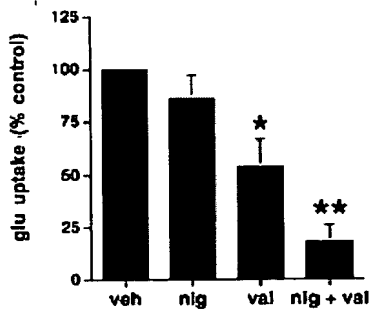


Fig. 13E